# THE COVID-19 PANDEMIC'S IMPACT ON PENNSYLVANIA'S NON-MOTORIZED TRAILS:

## Increased Use, Added Strain, and a Newfound Appreciation

# EXECUTIVE SUMMARY

Home to the Appalachian Trail, the D&L Trail, the Great Allegheny Passage, and the North Country Trail, along with hundreds of others: Pennsylvania is a trail state. During the COVID-19 crisis, trails and open spaces have provided a critical respite during "stay-at-home" orders, with trails across Pennsylvania seeing dramatic, measurable increases in user numbers. Trail managers throughout the state have observed many upsides to these increases as well as some negative impacts that must be addressed to maintain this critical public infrastructure. While Pennsylvania's trails have grown in popularity in recent decades, it is arguable that March and April of 2020 brought them their most attention yet.

Following a series of conversations with trails and conservation partners, the Pennsylvania Environmental Council (PEC) in March 2020 began a statewide research project to understand how business and recreational facility closures, along with stay-at-home orders, have impacted non-motorized trail use. This report contains a snapshot of information gleaned from a trail manager survey, an electronic trail count analysis, and a review of related media coverage.

## THE TAKEAWAY

**The main takeaway from this work is that the state's non-motorized trails have served as an outdoor recreation outlet for Pennsylvanians who have been placed under stay-at-home orders. Whether in urban centers or rural villages, people have heard the encouragement to enjoy outdoor recreation close to home and have found refuge in trails.**

**Because of this, PEC fully supports and encourages all levels of government – local, county, state, and federal – to treat outdoor recreation investments as a critical part of economic recovery as we move forward.**

## AMONG THE KEY FINDINGS ARE:

• Trail use was significantly higher in March 2020 in comparison to recent years, with some trails experiencing increases measured in the 100 to 200 percent range. The increases began the second week of the month when many schools and universities started closing, quickly followed by the closure of all businesses deemed non-essential on March 18. The spike in March trail use was so significant that it effectively kicked off "trail season" a month earlier than usual.

• Managers of short and medium length trails, which often serve a more localized population, reported mostly positive impacts. Managers of long-distance trails, which often accommodate tourists and longer distance travelers, reported more negative impacts. Additionally, administrators of multi-use/rail-trails (many of them long distance) were disproportionately more likely to express concerns related to the pandemic's impact on trail businesses.

• Managers along natural surface trails (such as hiking trails) cited more negative impacts when compared to multi-use and rail-trails. This may relate to the lower carrying capacity of these facilities.

## "EVERY DAY IS LIKE A WEEKEND DAY NOW."

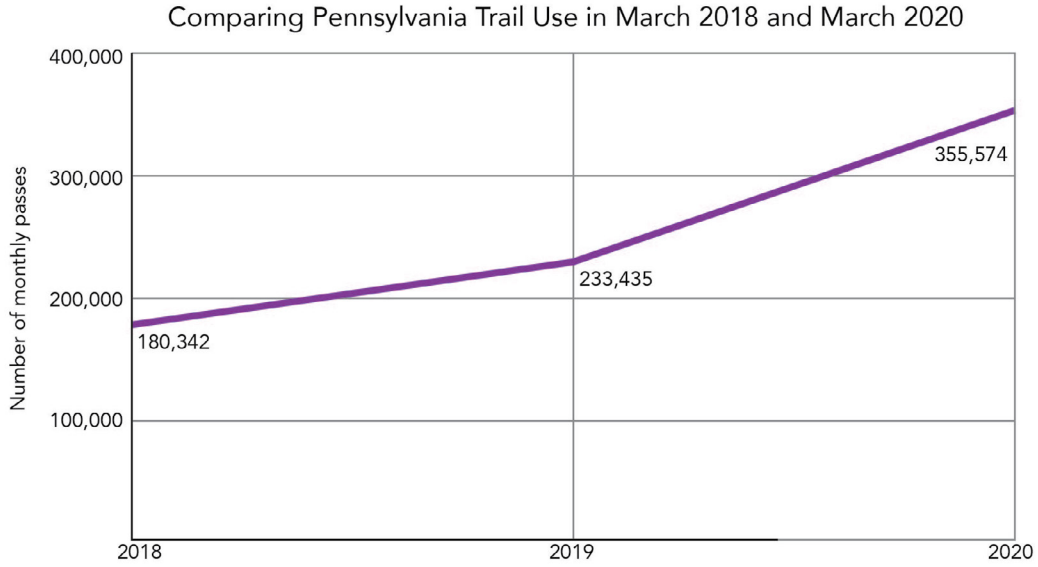
A total of 74 trail representatives shared their insights concerning 67 trails, parks, and natural areas around the state. Trail counts for 33 locations validate managers' reports: trail use is way up this spring.

The Lebanon Valley Rail-Trail (Lebanon Co.) is one example. "Every day is like a weekend day now," says Lebanon Valley Rails to Trails President, John Wengert, adding, "All of our parking lots have been full... and we have big parking lots!" An hour away on a weekend afternoon, a member of the project team visiting the Heritage Rail Trail (York Co.) had to try three different lots before finding parking. And the manager of the

Hanover Trolley Trail, also in York County, reports, "The trail is busy all the time every day." Similar stories exist throughout the State.

**For March 2020, trail count numbers from across the state show a 52% increase over 2019 numbers, and a 97% increase over 2018. The story for April is more difficult to tell in percentages.**

The aggregated April 2020 trail counts appear to have been consistent with 2019 counts, but require more study and explanation. While most trail counters indicated significant increases (and trail manager accounts support this), counters along a few typically high-traffic locations showed a steep decline in use. This happened along destination trails with otherwise small local populations and on one trail in Center City Philadelphia (Schuylkill Banks). This may reflect the impact of the statewide stay-at-home order issued by Governor Tom Wolf on April 1 for all 67 counties of Pennsylvania as well as local actions like the City of Philadelphia providing more open areas by limiting Martin Luther King Drive to pedestrians and cyclists only.




## A COLLECTIVE HOPE FOR TRAIL SUPPORT

A wide variety of factors are at play in determining how the COVID-19 pandemic is impacting Pennsylvania trails and how that impact might remain for years to come. A great deal seems to depend on the particular trail – its length, type, location, and management.

It appears that those most ecologically at risk are natural surface trails, while those trails (and trail communities) most economically at risk are the multi-use and rail-trails, especially those long enough to be considered "destination" trails.

No matter the path type, trail organizations are experiencing everything from increased interest to deferred maintenance, hiring freezes, and loss of revenues.

**This is a great time to have access to trails and a challenging time to manage them**. Despite the challenges faced, trail managers appear to be taking the situation in stride. Sixty percent of responding managers consider the pandemic's short-term impact on trails to be mostly positive[1]. Many share a collective hope that new and existing trail users will be more appreciative and supportive of trails after having found comfort and enjoyment in them this spring.

**Both the survey results and the trail data point to a need to support and expand Pennsylvania's burgeoning trail network, fulfilling Pennsylvania Department of Conservation and Natural Resources (DCNR)'s goal of a trail within 15 minutes of every Pennsylvanian.**

1. COVID-19's Impact on Pennsylvania's Non-Motorized Trails Survey, issued to trail managers in April 2020

# METHODOLOGY

## TRAIL MANAGER SURVEY

A 14-question Google Form survey, "COVID-19's Impact on Pennsylvania Trails," was distributed to identified Pennsylvania non-motorized trail managers beginning on April 20 and remained open for 10 days. The survey was distributed by PEC and DCNR staff members throughout the survey period. A total of 80 responses were received for 67 trails, parks, and natural areas. Of those, 74 responses were considered valid and have been included in the results shared in this report.

Multiple responses were received for long-distance trails, such as the Appalachian Trail, Great Allegheny Passage, and Schuylkill River Trail. In these cases, respondents were reporting on the specific trail section that they maintain.

While the survey instructed trail managers to submit one survey per trail or trail section, some responses received from municipalities, parks, and preserves related to their overall trail system. In most cases, the responses were applied to all sections of the system. These systems are generally shorter in total length and are also the types of trails to which people were directed under stay-at-home orders.

Survey responses were sorted by geographic region, trail length (in ranges of 1-14 miles, 15-39 miles, and 40+ miles), and trail type (mainly, multi-use/rail-trail, natural surface trail, and water trail).

## TRAIL COUNT ANALYSIS

The trail manager survey asked responding managers if they could provide electronic trail counts or other measures to indicate a year-over-year change in trail use. A total of 21 managers offered to make their trail count data available. Most of this data was sourced either through the individual managers or other sources, including the Delaware Valley Regional Planning Commission and the Pennsylvania Department of Conservation and Natural Resources (DCNR), sharing data for counters maintained by the Rails-to-Trails Conservancy. While the project was not limited to multi-use/rail-trails, it is important to note that usable year-over-year data was provided almost exclusively on this trail type.

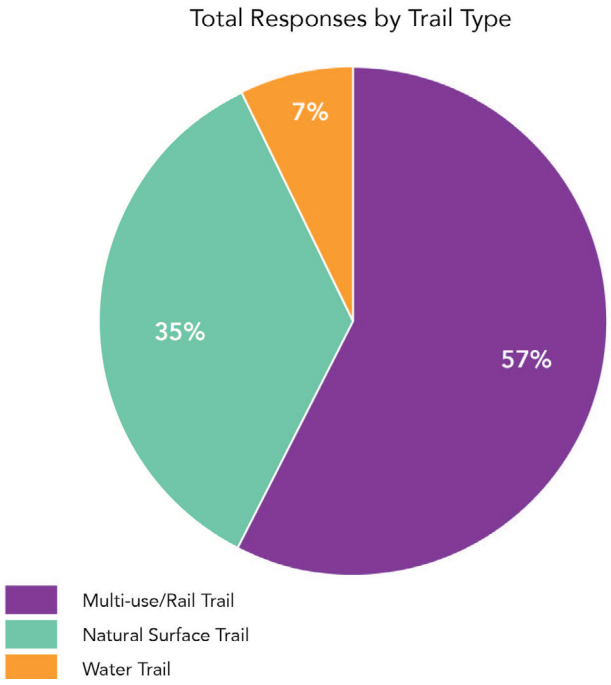
Trail count data represented collection sites from various trails and trail sections throughout Pennsylvania. Trail managers provided helpful insights to identify issues concerning the accuracy of electronic counters for multiple reasons. Data from eight of the electronic counters was removed from analysis due to reported inaccuracies affecting trail counts within the targeted months. These inaccuracies ranged from problems related to sensors, battery connectivity, data uploading, ant infestations, spider nesting, moisture, and vandalism. Data from another 24 electronic counters was also omitted from analysis due to a lack of previous year counts for comparison. Of the collected sample, it was determined that data from 16 electronic trail counters was useable for analysis, with each of the 16 counters having data available for March and April for each year of the study period.

Microsoft Excel was used to organize and analyze trail count data to determine if there was an overall change in counts during the months of March and April 2020 as compared to 2018 and 2019. March and April were selected for analysis due to correlating events, such as closing of non-essential businesses and stay-at-home orders associated with COVID-19 during these months. Multi-year data from 16 electronic trail counters was aggregated by month and year for comparison across years to generate percentages of change from March 2018 to 2020, March 2019 to 2020, April 2018 to 2020, and April 2019 to 2020.

Included in the analysis were six Eco Counters installed and maintained by Rails-to-Trails Conservancy, four other Eco Counters[2], five TrafX counters, and one trail camera (brand unknown).

2. Including several maintained by Delaware Valley Regional Planning Commission

# TRAIL MANAGER SURVEY DETAILED RESULTS




The trail manager survey provided a great deal of insight, with information ranging from how individual managers perceive the impact of the pandemic to the specific challenges being faced along their trail systems.

## RESPONDENT DETAILS

Of the 74 valid responses, nearly 6 in 10 were multi-use/rail-trail managers, followed by 35 percent natural surface trail managers, and seven percent water trail managers.

The majority of respondents (58 percent) represent short-distance trails, those ranging from 1-14 miles. Those with trails 40 miles or longer make up 26 percent of the responses, and those that range from 15-39 miles in length contributed 16 percent.

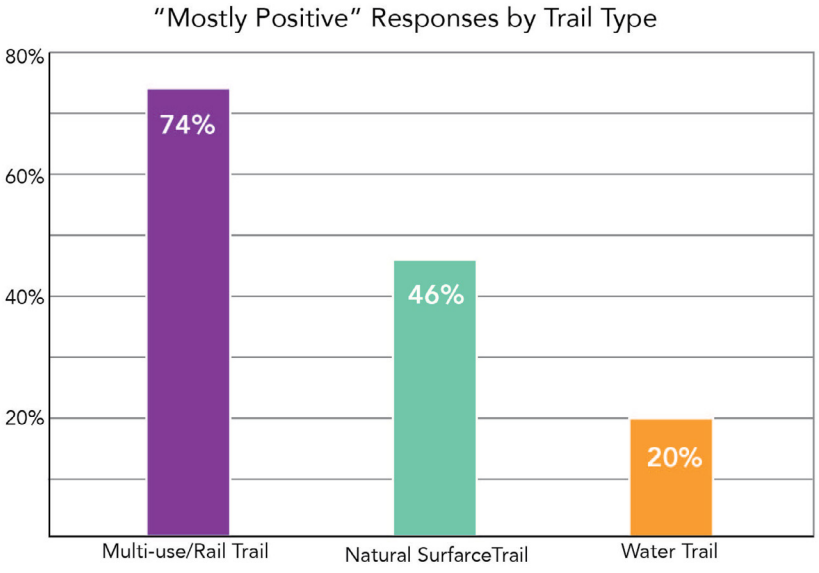
The Southwest and Southeast regions of the state had 20 and 16 responses, respectively. All other regions had between 6 and 11 responses.

## TRENDS OBSERVED BY TRAIL TYPE

The Dick and Nancy Eales Preserve (Lackawanna Co.) has had quite a busy spring. While the preserve does not have past spring counts for comparison, it has had a trail counter in place since October 2019. In comparing last October to this April, the preserve counters reflect that April was 284 percent busier. Break this down daily, and it is the difference between approximately 56 and 75 uses a day, not accounting for more use on fair weather and weekend days. While this may not sound like a lot of people, when a preserve is known as one of the best examples of ridge-top heath barrens in the northeastern United States, a significant jump in use is something to pay attention to.

The Eales Preserve is not alone in the sudden increase in trail use. Natural Lands (Delaware Co.) reports its trails have experienced a 400 percent increase (observable by parking lot activity) in recent months.

Both of these systems are comprised primarily of natural surface trails. Natural surface and water trail managers are markedly less optimistic than multi-use/rail-trail managers concerning the short-term impacts of the pandemic. While the water trail response is not easily interpreted given the small sample size, the outlook among natural surface trail managers is likely due to the carrying capacity of such trails. Commonly reported challenges include erosion, the widening of trails, muddy trails, and trailside vegetation loss. The words of one survey respondent describe "trails so busy that they cannot be maintained."



While natural surface trail managers have been less optimistic than multi-use/rail-trail managers concerning the short-term impact of COVID-19, as a group they are not overly negative. Many of the managers offered mixed responses in terms of the impact. Some noted the positive. The manager of the Green Ribbon Trail (Montgomery Co.), for instance, noted, "We got a surge of new followers on social media, and we're being contacted by more (and new) trail users with questions about the trail (where to park, etc.), which gave us an opportunity to connect with a wider community."

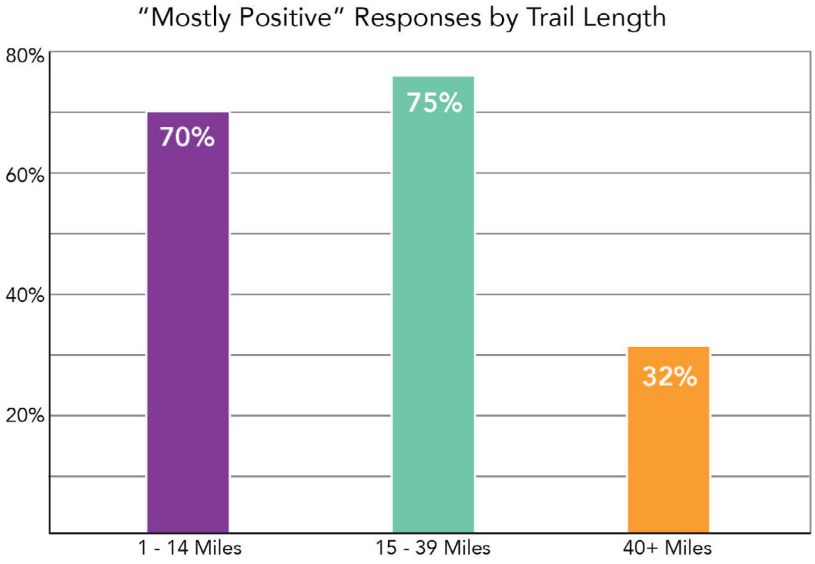
## BUSINESS IMPACT ALONG MULTI-USE/RAIL TRAILS

Another significant difference noted by trail type is that multi-use/rail-trails were the most likely to report the negative impact of trail businesses being unable to operate or provide typical services. One-third of multi-use/rail-trail managers expressed this concern. By comparison, just one in five water trail managers shared a similar concern, and none of the 26 natural surface trail managers did (although the responding Appalachian Trail clubs did note the cancellation of multi-day user trips, which is certain to impact trail-serving businesses).

## TRENDS OBSERVED BY TRAIL LENGTH

The longest trails and the businesses that line them may experience the worst economic loss.

The dichotomy of the economic crisis brought about by the pandemic is that while bike shops are swamped with repairs and even sales[3], other trail-serving businesses are struggling to keep afloat this season. Bike shops have been deemed essential services, and many are doing a brisk business serving local bike commuters and local residents with a new or renewed interest in cycling. In contrast, outfitters, shuttle services, B&Bs, and trailside cafes that normally rely upon visiting trail users taking overnight or multi-day trips have lost a significant source of income. One such business is Golden Triangle Bike (Allegheny Co.). In his recent blog post, "A Path to the New Normal," owner Tom Demagall writes that the company's trip planning service along the Great Allegheny Passage is its "bread and butter," adding, "We expected to send 1000+ riders on self-guided bike trips this season." While not all those trips will come to fruition given user cancellations, Golden Triangle and its lodging and transportation partners are operating in a modified capacity and doing their best to accommodate trips.




Among trails 40 miles or longer – those we might call "destination trails" – just 31.6 percent of respondents considered the impact to be "mostly positive." This compares to 69.8 percent of short-distance trails and a whopping 75 percent of medium-distance trail managers viewing the impact as mostly positive. Included among the "mostly negative" responses for trails 40+ miles were two water trail and four Appalachian Trail responses – the commonality among them being the temporary discouragement from using their trail facilities. A March letter from Appalachian Trail Conservancy President & CEO Sandra Marra offered an unprecedented message: "Please Stay off the Appalachian Trail."

The trails that may have fared best this spring are those in the 15-39-mile range. As mentioned, three-quarters of such respondents consider the short-term impact to be mostly positive. All of the trails in this range are multi-use or rail-trails. Thus, it is quite possible that medium distance rail-trails have experienced the most positive benefits and least amount of negative impact among Pennsylvania trails. They are durable, serve a local demographic, and are now catching the attention of residents who were not previously tuned in to trails.

3. "Bike shops are booming as pandemic rolls on," Pittsburgh Post-Gazette, May 7, 2020

## TRENDS OBSERVED BY REGION

The majority of managers in the state's most populated areas consider the short-term impact of the COVID-19 pandemic to be "mostly positive." One may have anticipated a less positive response given the potential for overuse in highly populated areas.

In the state's least populated regions (Northwest and Northcentral), greater than 8 in 10 trail managers view the short-term impact as positive. Some trails in these areas have likely benefitted from attracting local residents who are suddenly home from work and able to recreate without the negative overuse impacts experienced in more densely populated areas.

This is not to suggest that the trail communities in these areas are not struggling in other ways. A recent Pennsylvania Wilds Center white paper on the impacts of COVID-19[4] notes that outdoor recreation is the region's primary tourism draw, adding that Tourism Economics estimates that the tourism impact of the pandemic is seven times worse than that of 9/11. Trail managers in the region may have observed the most positive short-term impact, but they are also likely to suffer a loss in trail tourism.

## MOST MENTIONED POSITIVE AND NEGATIVE IMPACTS

The Trail Manager Survey revealed themes in terms of positive and negative impacts on both the trails and their managing entities. Some of the most mentioned impacts include:

| MOST MENTIONED POSITIVE IMPACTS | MOST MENTIONED NEGATIVE IMPACTS | MOST MENTIONED CHALLENGES FACED BY TRAIL ORGANIZATIONS, DEPARTMENTS, AND AGENCIES |
|---|---|---|
| Trails are being used and perceived as positive outlets (89%) | Delays in seasonal maintenance (47%) | The temporary loss of volunteers (51%) |
| A change in trail user demographics (81%) | Overuse and crowding (44%) | Challenges articulating trail use guidelines (49%) |
| Increased awareness and interest in trails (74%) | Increased littering and illegal dumping (37%) | Loss of revenues (42%) |

4. "White Paper on the Impacts of COVID-19 on the rural Pennsylvania Wilds Initiative," Pennsylvania Wilds Center, May 8, 2020

# FULL LIST OF IMPACTS AS REPORTED BY TRAIL MANAGERS

| POSITIVE IN NATURE | NEGATIVE IN NATURE | | |
|---|---|---|---|
| Change in user demographics | Construction delays | Overuse and crowding on trails | Lack of transit access due to schedule changes |
| Increased citizen stewardship | Delays in seasonal maintenance | Increased conflicts among users, neighbors | Challenges articulating trail use guidelines |
| Increased donations and financial support | Inability to keep up with standard maintenance | Overcrowding concerns by adjacent property owners | Improper uses among new users (littering, climbing, dogs off leash) |
| Increased interest and awareness of trails | Concerns around ability to catch up on maintenance backlogs | Social distancing complaints, conflicts | Increased illegal dumping, change in type of litter (PPE, TP, etc.) |
| Trails being used as outlets for health and wellness | Temporary closure of certain trails | Parking lots at capacity, illegal parking on adjacent properties | Increased littering |
| Additional use by walkers/joggers | Closure of some water trail access locations | Increased logistics for trail/maintenance staff | Increased vandalism, graffiti |
| Sense of gratitude for trails | Event cancellations (5Ks, etc.) | Internal communication challenges due to social distancing requirements | Increased dog waste, dogs off leash in ecologically sensitive areas |
| | Uncertainty around future funding levels | Informal widening of trails causing erosion, loss of vegetation | Increased illegal motorized uses |
| | Loss of revenues (event fees, programs, vendor fees, donations) | Concerns about not meeting grant requirements | Rogue trail construction |
| | Loss or delay of funding sources (grants, loans) | Temporary loss of volunteers | Educational outings cancelled |
| | Multi-day user trips delayed or cancelled | Trail employees furloughed or laid off | Reduced visitor center hours |
| | Trail businesses unable to open/provide services | Hiring freezes implemented | |

## TRAILS, PARKS, AND NATURAL AREAS REPRESENTED IN SURVEY RESULTS

Allegheny River Trail (Franklin to Emlenton)
Appalachian Trail
Armstrong Trails
Ashbridge Preserve
Babbling Creek Trail (Highland Park)
Back Mountain Trail
Bald Eagle Valley Trail
Bellefonte Central Rail Trail (PSU section)
Buffalo Valley Rail Trail
Butler Freeport Community Trail
Chadds Ford PA campus trails
Chester Valley Trail
College Township Bikeway along the Expressway
Corry Junction Greenway Trail
Countryside Conservancy Trolley Trail
Cumberland Valley Rail Trail
D&H Rail-Trail
D&L Trail
Delaware River Water Trail
Doylestown Township community trails
East Branch Trail
Emerald View Trail
Falls Ravine Trail (Frick Park)
Fairmount Park Conservancy Trolley Trail
Forbes State Forest Trails
French & Pickering Creeks Conservation Trust
French Creek Water Trail
Frick Park Lower Riverview Trail
Ghost Town Trail
Great Allegheny Passage
Green Ribbon Trail
Hanover Trolley Trail
Hawk Mountain Sanctuary
Hemlock Trail
Indian Creek Valley Trail
Knox and Kane Trail/Rail 66 (24-mile section)
Lackawanna River Heritage Trail
Lebanon Valley Rail-Trail
Lower Trail (Blair/Huntingdon County)
Mason-Dixon Trail
McClintock Trail
Mondauk Common
Whitmarsh Township Multiple Trails
Natural Lands Preserve Trails
North Branch Canal Trail
North Pocono Community Trails
Northwest Lancaster County River Trail
Orchard Park Bikeway
Redbank Valley Trails
Riverfront North Greenway
Riverview Park
Roaring Run Trail
Schenley Park
Schuylkill River Trail
Sheepskin Trail
South Side Park Trail
Struble Trail
The Montour Trail
Three Rivers Heritage Trail
Three Rivers Water Trail
Lancaster Conservancy preserve trails
West Penn Trail
Westmoreland Heritage Trail
Yellow Ridge Trail - Michaux State Forest
Yough River Water Trail
Zacharias Trail

## TRAIL COUNTERS REPRESENTED IN TRAIL COUNT ANALYSIS

Buffalo Valley Rail Trail (RTC Eco-Counter)
Chester Valley Trail (Batcon Hill)
Chester Valley Trail (Cedar Hollow)
Cumberland Valley Rail Trail (RTC Eco-Counter)
Great Allegheny Passage (Ohiopyle - 2 counters)
Lackawanna River Heritage Trail (RTC Eco-Counter)
North Branch Canal Trail (Mahoning)
Northwest Lancaster Co River Trail (RTC Eco-Counter)
Schuylkill River Trail (Pottstown)
Stavich (RTC Eco-Counter)
Susquehanna River Walk (RTC Eco-Counter)
Chester Valley Trail (DVRPC)
Schuylkill River Trail at Schuylkill Banks (DVRPC)
Schuylkill River Trail at Spring Mill (DVRPC)
Wissahickon Trail (DVRPC)

## ADDITIONAL TRAIL COUNTERS CONSIDERED

(insufficient data for inclusion in trail count analysis)

Armstrong Trail (RTC Eco-Counter)
Countryside Cons Trolley Trail (Glenburn)
Countryside Cons Trolley Trail (Clarks Summit)
D&L Trail Hugh Moore Park
D&L Trail (Del Canal SP) New Hope (RTC Eco-Counter)
Enola Low Grade (RTC Eco-Counter)
Lackawanna River Heritage Trail (Archibald)
Lackawanna River Heritage Trail (Carbondale)
Redbank Valley Trail (RTC Eco-Counter)
Samual Justus Trail (RTC Eco-Counter)
Sheepskin Trail (RTC Eco-Counter)
York County Heritage Rail Trail (RTC Eco-Counter)
D&L Trail at Tinicum Park (DVRPC)
D&L Trail at Washington Crossing (DVRPC)
Delaware River Trail at Port Richmond (DVRPC)
Schuylkill River Trail near Kelly Drive (DVRPC)
US 202 Parkway Trail** (DVRPC)

# ACKNOWLEDGEMENTS

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